

Remarks/Arguments

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Amendments to the Specification

10 The second paragraph of the "Detailed Description of the Preferred Embodiment" section of the present application has been amended to correct a typographical error concerning the element numbers for the feeding terminal as shown in Fig.4. In two locations, the element number has been changed from 56 to 54 as previously identified in the same 15 paragraph. No new material has been introduced.

Claim Rejections

Examiner:

20 Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Ikegaya et al. (U.S. Patent No. 6,600,448).

25 The Ikegaya et al. reference teaches in figure 2 a monopole antenna for a wireless device, the antenna comprising a conductor plate having a first plate portion 6 and a second plate portion 3, the first plate portion 6 having a width between a first edge and a second edge thereof and a height for producing a first resonance band and a second resonance band, the second plate portion 3 being connected to the first edge of the first plate portion 30 for feeding signals of the first resonance band and the second resonance band, the first plate portion producing the first resonance band corresponding to the length from

the first edge to the second edge thereof, and producing the second resonance band corresponding to the length from the first edge to the second edge and back to the first edge. The second plate portion is L-shaped. The first plate 5 portion is rectangular.

Response:

Independent claims 1, 3, and 7 have been amended to 10 include the limitation of the second resonance band corresponding to the length from the first edge to the second edge and back to the first edge plus a portion of the height. This limitation is clearly supported by Fig.2 and the 4th 15 paragraph of the "Detailed Description of the Preferred Embodiment of the present application. No new material has been introduced.

The Applicant believes that the present invention as 20 claimed differs from that of Ikegaya et al. for at least the following reasons.

The cited reference discloses a single band, flat plate antenna having a radiating element 3 (Figs.1, 2) and a grounding element 4 with a slit of a specified width formed 25 between them. The length of the radiating element 3 is substantially a multiple of a quarter of a wavelength attained at the operating frequency of the antenna by an odd-numbered value (Abstract).

Therefore, the disclosure of Ikegaya et al. teaches 30 an antenna that transmits or receives a single frequency band according to the length of the radiating element 3.

On the other hand, the present invention discloses a dual band monopole antenna that uses a single first (preferably substantially rectangular) conductor plate. 5 When fed radio frequencies via a relocated feeding terminal (item 54, Fig. 4) on the second conductor, the first conductor plate can effectively resonate at two predetermined, non-overlapping frequency bands L1 and L2 (Fig. 5) whose paths are clearly depicted in Fig. 4. The prior art does 10 not teach this. Those skilled in the art are well aware that the positions of the feeding terminals and grounding elements are important considerations in the design of an antenna.

15 The present invention antenna becomes suitable for GSM 900, 1800, and 1900 systems by restricting the area of the first conductor plate. By increasing the area of the second conductor plate, the second EM resonance band L2 can be increased to be larger than the frequency difference between 20 the second resonance band L2 and a third resonant frequency F3 within the GSM 1900 band (5th paragraph of the "Detailed Description of the Preferred Embodiment").

Therefore, the present invention teaches an antenna 25 that transmits or receives multiple predetermined frequencies according to restrictions placed on the area of the first conductive plate. The path lengths defined for the first resonance band and the second resonance band as claimed point out these restrictions.

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As such, the Applicant believes that the present invention as claimed is structurally and functional

different than that of the cited prior art and respectfully
requests reconsideration of claims 1-8.

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Sincerely,

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